

GREAT SALT LAKE MINERALS & CHEMICALS CORPORATION
A SUBSIDIARY OF GULF RESOURCES & CHEMICAL CORPORATION
P.O. BOX 1190 • 765 N. 10500 W. LITTLE MOUNTAIN • OGDEN, UTAH 84402 TEL. (801) 731-3100 • TWX (910) 971-5910

To Pam
File ACT/057/002

JIM
MAR 07 1984

March 1, 1984

MAX J. REYNOLDS
VICE PRESIDENT OPERATIONS

Mr. James W. Smith, Jr.
State of Utah Natural Resources
Oil, Gas & Mining
4241 State Office Building
Salt Lake City, UT 84114

RECEIVED
MAR 7 1984

Dear Mr. Smith:

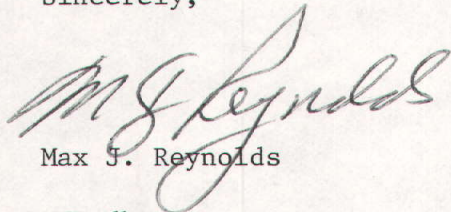
DIVISION OF
OIL, GAS & MINING

Enclosed you will find:

1. Revised Annual Operations and Progress Report (Form MR-3).
2. Two additional GSL drawings Nos. 800-11-05-19 and 800-11-05-20, which show locations for the additional leased gravel pits recently re-opened.
3. Revised and executed Bond Form as agreed to with Ms. Pam Littig. Our original Bond is adequate to cover the small increase as shown.

All other documents previously filed remain unchanged.

Sincerely,



Max J. Reynolds

MJR:dh

Enclosure

ANNUAL OPERATIONS AND PROGRESS REPORT

From Month/Year February 1984
to Month/Year February 1985

(To be submitted for each mining operation at the end of each calendar year to the Division at this address:)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, Utah 84114

OPERATOR: Great Salt Lake Min. & Chem. Corp. MINE NAME: Great Salt Lake Min. & Chem. Corp.

ADDRESS: 765 North 10500 West
Ogden, Utah 84404

PERMIT NUMBER AND DATE OF PERMIT: ACT/057/002 September 2, 1983

REPRESENTATIVE: M. J. Reynolds

As previously filed - no changes.

SECTION(S): _____ TOWNSHIP(S): _____ RANGE(S): _____

MINERAL(S) MINED: Gravel, Rock

STATE AND/OR FEDERAL MINERAL LEASE NUMBERS: No change from those previously submitted.

SPECIAL USE PERMITS AND/OR RIGHTS-OF-WAY: None

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

Disturbance

Acreage

Pit

141.3

Roads

Included above

Facilities

Waste Dumps

Other

(b) Tabulation of acreage affected to date (by years).

Date by Year

Acreage (Total

1975

1976

1977

1978

1979

1980

1981

1982

1983

91

141.3 (9 leased)

(c) Tabulation of all topsoil (new) stockpile volumes (see chart below) and date of stockpiling. None

SOIL TABULATION CHART

Area Affected (in mining sequence)
(If more space is needed, please attach.)

Area

1 2 3 etc.

Acreage of Area

Depth of Topsoil Removal (inches)

Depth of Topsoil Replacement (inches)*

Estimate of Topsoil Volume Salvaged (yd³ or ac ft)

Volume Actually Salvaged (yd³ or ac ft)

Volume Required for Reclamation (yd³ or ac ft)

Surplus or Deficit Volume (yd³ or ac ft)

Storage Status (short- or long-term)

Soil Tabulation Chart (continued)

Area Affected (in mining sequence)	Area			
	1	2	3	etc.
Storage Location				
Area Where Soil Has Been Used (if not stored)				
Running Total (all stockpiles) (yd ³ or ac ft)				
Short-term				
Long-term				

*Of previously stripped area recently reclaimed.

None Reclaimed.

(d) Tabulation of all (newly removed) out-of-pit spoil volumes, date of placement and illustration on a map.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>

(e) Tabulation of quantity of commodity mined.

	<u>Commodity</u>	<u>Tonnage</u>
(Mined)		
(Milled)		

(f) Description of any new construction during the report period with illustration on a map, including, but not limited to:

1. Buildings and support facilities.

2. Roads.

3. Diversion ditches, collector ditches, interceptor ditches, etc.

4. Culverts.

5. Sediment ponds, containment ponds.

6. Monitoring sites (vegetative, air quality, surface subsidence, surface water or ground water, etc.).

7. Topsoil stockpiles.

(g) Description of any environmental problem areas with a proposed plan for mitigation and illustration on a map, including, but not limited to:

1. Pit stability problems.

2. Subsidence.

3. Accidental water discharge, dam failure, etc.

4. Slumping, sliding or erosion.

5. Revegetation problem areas.

6. Existence and location of unsuitable (toxic) overburden.

RECLAMATION: None During This Period

(a) Tabulation of the acreage reclaimed during the report period with illustration on a map, distinguishing between:

1. Backfilled, graded and contoured areas.

Area

Acreage

2. Topsoiled areas.

Area

Acreage

3. Seeded areas.

Area

Acreage

4. Reseeded areas (areas previously seeded, then seeded again).

Area

Acreage

(b) Tabulation of total acreage reclaimed (seeded with permanent seed mix) to date by years with illustration on an updated map:

Year

Acreage

1975
1976
1977
1978
1979
1980
1981
1982
1983
1984

(c) Description of the reclamation procedures used during the report period, including:

1. Average depth of topsoil applied.

2. Type of seed (species) used for seeding during the report period.

3. Date of seeding during the report period.

Spring

Fall

1983 - Test Plot Only - Done August 1983

4. Seeding procedures used.

(Hand broadcast or drilled or any other).

Hand Spreader

5. Rate of seed application.

Pounds Per Acre of Pure Live Seed (PLS) (if varied, please explain)

Varied: Alkali Sacaton 1 lb/acre Big Sagebrush 12 lb/acre
Western Wheatgrass 4 lb/acre
Basin Wildrye 4 lb/acre
Yellow Sweetclover 2 lb/acre

6. Type and rate of fertilizer applied.

KCl - 100 lbs/K₂O per acre
Nitrogen (Urea @ 46% N_a) - 50 lbs/acre
P (44% P₂O₅) - 60 lbs/acre

7. Type and rate of mulch applied.

None

8. Rate of irrigation water applied, if any. Please describe any type of sprinkling, or water applied (water truck, etc.).

None

9. Revegetation test plot information.

(Cover, density, productivity, etc.)

As stated above (No. 3, Fall)

10. Soil analysis results.

(d) Description of results of previous revegetation efforts, including:
(This should be done as applicable.)

1. Types (species) of seed that have germinated and are growing.

2. Types (species) of seed that are not growing successfully.

3. Areas experiencing problems with weeds and weed types.

4. Significant erosional problems.

5. Areas of unsuitable overburden on the surface as related to revegetation failure.

6. Procedures used or proposed to correct these problems.

7. Acreage and dates of release (upon inspection by the State) of revegetated areas.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>

8. Results of soil analysis.

(e) Summarization of the reclamation costs incurred during the report period, including itemized costs for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per acre basis.

	<u>Acres</u>	<u>Cost/Acre</u>
1. Grading		
2. Backfilling		
3. Contouring		
4. Topsoil Replacement		
5. Seeding		
A. Seedbed Preparation		
B. Mulch		
C. Fertilizer		
D. Seed		
6. Other		

BOND INFORMATION:

- A. An updated bond estimate should be included, if required in the Division's approval of the Mining and Reclamation Plan (MRP) or if changes to the MRP have occurred, including a detailed itemization of actual/estimated reclamation costs as outlined in the RECLAMATION section above. The date of the release of revegetated areas from further responsibility for a partial bond release, if applicable, should also be included.

	<u>Amount</u>	<u>Type</u>	<u>Date Posted</u>
Present Bond	<u>\$250,000</u>	<u>Surety</u>	<u>March 11, 1983</u>

Increased disturbance, if any: 41 acres GSL
9 acres Leased

Increased Bond Amount (attached reclamation estimate).

Attached

B. Bond release.

<u>Acres</u>	<u>Bond Amount Released</u>	<u>Date</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ADDITIONAL INFORMATION:

Supply any additional information as requested by the Division related to:

- (a) Permit stipulations (status).
- (b) Other special conditions (status).

APPENDIX I

ANNUAL REPORT MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = 500 feet to adequately show topographic features.
2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.
3. Maps must have a title block with:
 - A. Map title.
 - B. Name and address of permittee.
 - C. Permit and amendment numbers.
 - D. Annual report period.
 - E. Scale, north arrow, contour interval, date of photography, etc.
4. All maps must show:
 - A. Legal subdivisions.
 - B. Permit area boundary clearly shown and labelled.
 - C. Amendment areas clearly shown and labelled.
 - D. Contour features.
5. The following features should all be clearly identified:
 - A. Topsoil stockpiles (numbered and with volumes).
 - B. Settling ponds and sediment control structures.
 - C. Haul roads.
 - D. Pits identified by location, name, number, etc.
 - E. Ramps (numbered).
 - F. Out-of-pit spoil dumps.
 - G. All waste disposal sites including, but not limited to:
 1. Landfill sites.
 2. Carbonaceous waste dumps.
 - H. Diversion ditches.
 - I. Monitoring sites.
6. All areas to be affected by mining and reclamation in the coming year should be outlined and labelled.